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Cover: Growth cones of the leech embryonic Comb cell (CC) growing between the circular and longitudinal muscle layers of the developing germinal plate. HmLAR2, a receptor protein tyrosine phosphatase which is highly expressed by these growth cones helps to control the navigation of these projections. Phalloidin staining of the actin cytoskeleton of the CC and the surrounding muscle layers (green) has been superimposed upon an intracellular dye-injection of the CC (red). See article by M. W. Baker, S. J. Rauth, and E. R. Macagno, pages 47–60 of this issue.

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Cover: Double-label immunofluorescence image illustrating the mostly non-overlapping distribution patterns of Gal-NCAM (green) and PSA-NCAM (red) in a coronal section of an E19 rat olfactory bulb. PSA-NCAM immunoreactivity as revealed by the monoclonal antibody 735 is located in the deepest layers of the olfactory bulb and in the outer nerve layer. Gal-NCAM (revealed by the monoclonal antibody 2E11) is expressed mostly on axons in the inner nerve layer. Co-localization of PSA-NCAM and Gal-NCAM, corresponding to the yellow zones, occurs at the junction between inner and outer nerve layers. See article by L. Pays and G. Schwarting, pages 173–185, Vol. 43 #2 May 2000.

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Cover: A neuromuscular junction from the frog, showing 3 cellular components: the motor nerve terminal labeled with the dye FM4-64 (top image, red), perisynaptic Schwann cells labeled with monoclonal antibody 2A12 (second image, blue), and acetylcholine receptors in the muscle fiber membrane labeled with α-bungarotoxin (third image, green). The merged image (bottom) shows the precise overlap between these cellular components. Herrera et al. show that during embryonic development, Schwann cells are not confined to neuromuscular junctions as in adults, but instead extend long processes that may guide synaptic growth. See article by Herrera et al., pages 237–254, this issue.